BRUHATH BANGALORE MAHANAGARA PALIKE, DASARAHALLI ZONE

Office of the Executive Engineer Dasarahalli Division,

Schedule-B

NAME OF WORK: Improvements To Roads At 1st,2nd,3rd,4thCross,1st main Road Kalyana Nagara , 15th C Cross Prashanth Nagara And Surrounding Area In Ward No 13 Shettyhalli Sub-Division.

Sl. No	Description of work	Unit	Qty	Rate quoted by the Contractor Sri R Shivaram	
				In Figures (Rs.)	Amount
1	2	3	4	5	7
1	Earthwork excavation by manual means for roads, drains & similar works in ordinary soil invoiving , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification	Cum	509.80	129.12	65825.38
2	Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications.	Cum	64.32	5162.24	332035.28
3	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm	Cum	75.15	6736.49	506247.22
4	Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.	Tonne	4.88	67770.38	330719.45

Signature of the Contractor

EXECUTIVE ENGINEER
Bruhat Bengaluru Mahanagara Palike
Dasarahalli Division, Bengaluru-73.

Executive Engineer
Dasarahalli Division
BBMP

5	Providing and fixing Precast RCC cover slabs of 100 mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work, lift charges,curing and concrtee finished surface on both sides etc,and complete as per the directions of Enginner in charges.(Data Rate)	Sqm	144.00	1513.26	217909.44
6	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6 stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.	Cum	29.52	4583.46	135303.74
7	Providing ruled pointing to coursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. – do – cement mortar 1:3	Sqm	65.60	144.83	9500.85
8	Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications.	Sqm	1022.40	89.39	91392.34
9	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications.	Cum	43.20	892.90	38573.28
10	Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications.	Sqm	1310.40	5.96	7809.98
11	Providing, laying, spreading and compacting cushed stone aggregates of granite / trap I basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve thedesired density complete as per specifications.	Cum	298.80	1875.20	560309.76

Signature of the Contractor

EXECUTIVE ENGINEER
Bruhat Bengaluru Mahanagara Palike
Dasarahalli Division, Bengaluru-73.

Executive Engineer
Dasarahalli Division
BBMP

12	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum)	Cum	43.20	5016.72	216722.30
13	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.	Sqm	288.00	67.54	19451.52
14	Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg I sqm using mechanical means complete as per specifications.	Sqm	1022.40	26.82	27420.77
15	Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen	Cum	48.42	6181.80	299322.76
16	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501	Sqm	2192.00	4.97	10894.24

Signature of the Contractor

EXECUTIVE ENGINEER
Bruhat Bengaluru Mahanagara Palike
Dasarahalli Division, Bengaluru-73.

Executive Engineer
Dasarahalli Division
BBMP

17	Providing and applying tack coat using 80/100 grade bitumen(VGIO) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH	Sqm	2192.00	11.92	26128.64
18	Providing and laying bituminous concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. Clause 507 of MORTH V Version as per IRC SP-53-2015,do-Using 40-60 TPH Capacity HMP With Mechanical Paver Grading II (30-45mm) with 5.4% of Modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (Waste Plastic)	Cum	90.32	7265.40	656210.93
19	Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications. MORTH -100/ Chapter 1	Cum	629.68	53.41	33631.21
20	Cost of Haulage Excluding Loading and Unloading MORTH -100/ Chapter 1 Case-I : Surface Road	t.km	629.68	23.99	15106.02

Signature of the Contractor

Executive Engineer,
Dasarahalli Division.

EXECUTIVE ENGINEER
Bruhat Bengaluru Mahanagara Palike
Dasarahalli Division, Bengaluru-73.

Executive Engineer
Dasarahalli Division
BBMP